

# Claims

[c1] What is claimed is:

1. An extrusion-free wet cleaning process, comprising:  
providing a wet cleaning tool;  
preparing a wafer having a main surface comprising at least one exposed copper feature and a dielectric film;  
transferring said wafer into said wet cleaning tool in a light inhibited manner; and  
cleaning said main surface of said wafer by contacting a cleaning solution in said light inhibited manner.

[c2] 2. The extrusion-free wet cleaning process according to claim 1 wherein said wafer is a semiconductor wafer.

[c3] 3. The extrusion-free wet cleaning process according to claim 1 wherein said exposed copper feature is damaged into said dielectric film.

[c4] 4. The extrusion-free wet cleaning process according to claim 1 wherein during said cleaning step of said main surface of said wafer in said light inhibited manner, said wafer is not exposed to light.

[c5] 5. The extrusion-free wet cleaning process according to claim 1 wherein said wet cleaning tool comprises a suc-

cession of sinks containing said cleaning solution.

- [c6] 6. The extrusion-free wet cleaning process according to claim 1 wherein said wet cleaning tool is a single-wafer cleaning tool.
- [c7] 7. A wafer wet cleaning system comprising a wet cleaning tool for performing a wafer cleaning process and a light inhibiting means for preventing a wafer to be cleaned from light exposure during said wafer cleaning process.
- [c8] 8. The wafer wet cleaning system according to claim 7 wherein said wet cleaning tool comprises a succession of sinks for containing cleaning solution.
- [c9] 9. The wafer wet cleaning system according to claim 7 wherein said wet cleaning tool is a single-wafer cleaning tool.
- [c10] 10. The wafer wet cleaning system according to claim 7 wherein said wafer has a main surface comprising at least one exposed copper feature and a dielectric film.
- [c11] 11. The extrusion free wet cleaning process according to claim 7 wherein said wafer is a semiconductor wafer.